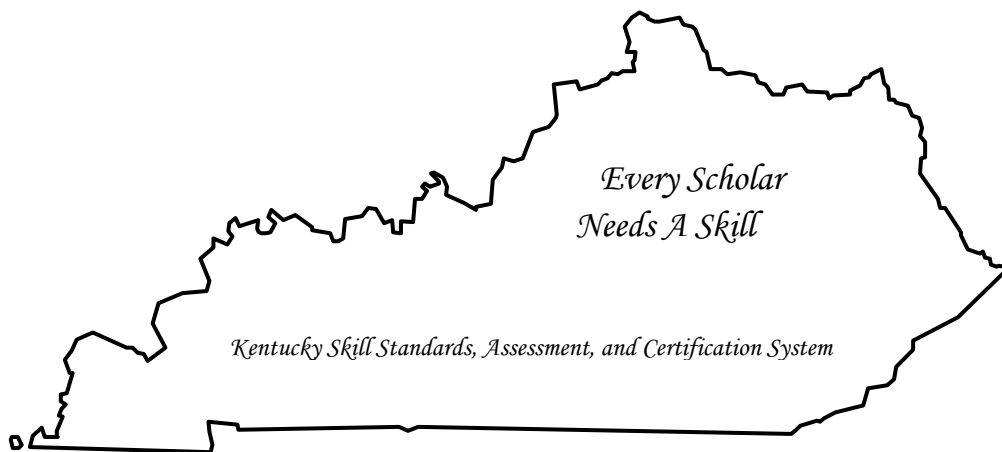


Kentucky Transportation Skill Standards



Established by the Transportation Skill Standards Task Force

Revised
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ACKNOWLEDGMENTS

As Project Coordinator for the Transportation Skill Standards Project, I have been privileged to work with outstanding Business and Industry Representatives and teachers from secondary industrial technology education programs across the state. These teachers represent area technology centers, high school programs, and locally operated vocational centers. This group has reviewed, endorsed, edited, rewritten, and revised documentation relating to this skill standards projects.

The mission of the Transportation Skill Standards Task Force was to develop a “user-friendly” document that would serve as a tool for instruction for all industrial technology education teachers. Our hope is that schools/teachers will use this document as a framework for further curriculum development. Future plans for the Task Force will include regular reviews and updates to the document as other career major areas are implemented.

A project of this significance relies heavily on the support and cooperation of many. The state effort could not have been accomplished without the persistence and guidance from Pamela Moore, State Skill Standards Project Director, and Mikala Rahn, national consultant for the effort. On behalf of the Kentucky Department of Education, Division of Career and Technical Education, I would like to acknowledge the support of the Transportation Skill Standards Task Force and the contribution they made to this project. The following persons served on this task force:

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With Many Thanks,

Larry Helphinstine, Industrial Technology Education Consultant
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INTRODUCTION

Transportation Career Cluster Core

In 1990, the Kentucky Education Reform Act (KERA) academic goals outlined what every student in Kentucky schools should know and be able to accomplish. In 1999, Kentucky began development of the Kentucky Transportation Skill Standards that answers the question: “What does a worker need to know and be able to do to contribute to the safe and effective delivery of transportation occupations and related occupations?” The standards inform current and future transportation employers, employees and educators about what skills and knowledge workers need in order to succeed—in a job, a life-long career and as in the role of wage earner.

The need for development of skill standards originated at a summit called by the National Governors Association, the Education Commission of the States and the president of IBM Corporation. The focus of this summit looked at how standards for education and technology could be developed across the country to increase student achievement. As a result, Governor Paul Patton directed the Workforce Development Cabinet and the Department of Education to work on three objectives:

- Give more value to student work in high schools
- Utilize standards to reflect high expectations
- Apply performance (skill) standards to occupations

Contrast our transportation system to that of a hundred years ago and it is apparent that the national economy is dependent on the transportation industry. The transportation industry touches everyone’s life in our world today through the use of air, marine, and land modes of transportation. Today’s economy is more efficient and profitable because of the advancements of technology in the transportation industry.

The transportation industry involves the moving of people and goods. Buses, aircraft, and automobiles are examples of vehicles used to move people. Trucks, trains, and marine vehicles are used to move goods. To accomplish the transporting of people and goods a qualified transportation workforce is required by the transportation industry.

Since employers are experts at knowing what skills are needed in the workplace, it was determined that they define the skill standards through the work of the Transportation Skill Standards Task Force. Educators will develop curricula to support and implement the transportation skill standards. Employers and educators will jointly participate in and validate the process. This assessment system will involve educators and task force member in the development, evaluation and implementation of the assessment process. This is accomplished through committees and sub task force group meetings and workshops.

The standards included in this document are core standards and serve as a foundation to the Transportation Skill Standards developed by Federal Aviation Administration, Inter-Industry Conference on Auto Collision Repair, Department of Transportation, Automotive Service Excellence, and other specific industries requirements. These standards are divided into three categories: Academic Skills and Knowledge, Employability Skills and Knowledge and Occupational Skills and Knowledge.

Preparation for Tomorrow's Workforce

Carl D. Perkins Vocational and Technology Act of 1990 mandates broad vocational, rather than job-specific, training and an integration of academic and vocational content. The Act requires programs to provide students with a general understanding of "all aspects of an industry." More recently, the first of the five Indicators of Performance in the new Perkins legislation addresses "student attainment of challenging state-established academic and vocational/technical skill proficiencies."

Skill Standards are the performance specifications that identify the knowledge, skills and abilities, and individual needs to succeed in the workplace. Identifying the necessary skills is critical to preparing students for entry into employment. Skill standards provide a common vocabulary to enhance communication between:

- Employers and Job Seekers—to specify the knowledge, skills, aptitudes and attitudes required for recruitment, hiring, and retention in a company or within an industry.
- Employers and Schools or Job Training programs--to encourage the alignment of school curricula with industry requirements, to update educational objectives as workplace demands change, and to ensure a better return on public and private education and training investments.
- Employers or Job Seekers and Schools or Job Training Programs--to help employees and job seekers make decisions about their own education and training needs in a changing market place.

In the most successful workplaces, the only constant is change. Jobs that were previously simple now require high performance work processes and enhanced skills in order to compete globally. Skill standards reflect these changing workplace realities and are keys for helping applicants and employers enjoy greater career opportunities and achieve higher standards of living and economic security.

Kentucky's Certification System

Skill standards are important today to educators, employers, and students who desire jobs after graduation from high school. The Division of Career and Technical Education, in conjunction with employers from the transportation industry, are working together to develop a system to certify that students have attained the necessary skills for employment. The first step in developing this system was the development or adoption of skill standards that describe the necessary occupational, academic and employability skills needed to enter the industry. Mastery of these standards would signal to employers that the student is employable and ready to begin employment with the industry.

In order to insure that students in fact attained the necessary skills described in the standards document, students will be assessed based on the standards. The assessment system includes two components:

Multiple-choice questions specifically testing the mastery of the Skill Standards; and

Problem-based scenario to test the students problem solving and decision-making skills related to their occupational standards.

Students who successfully complete each of the components at a percentage previously set, will receive an industry recognized certificate to provide to employers communicating their mastery of the standards.

Program Sequence for Industrial Technology Education Transportation Skill Standards

Students should complete a coherent sequence of courses from the secondary Industrial Education Transportation Cluster curriculum. In order to be successful on the Skill Standards assessment, students should complete a minimum of three credits from the following courses from the Kentucky Program of Studies or comparable courses from the Kentucky Tech curriculum: Automotive Technology, Collision Repair and Refinish, Diesel Technology, Commercial/Recreational Small Engine Technology, and Aviation Technology

The Kentucky Transportation Core Skill Standards can be used as a framework for linking academic curricula to actual teaching practices, school to work, secondary education to post-secondary education, and students to their community. These connections will strengthen the transportation industry.

SkillsUSA VICA incorporates academic, employability, and occupational skill standards into the competitive events program at the regional, state and national levels.

The Skill Standards Document

The Skill Standards Document describes the skill standards to be assessed in the certification process. Current curriculum in Industrial Technology Education offered in your school should be aligned to these standards. A crosswalk shows the relationship between the transportation core skill standards, Kentucky academic expectations, and the Secretary's Commission on Achieving Necessary Skills (SCANS). SCANS was developed by the U.S. Department of Labor in 1991 with the involvement of employers from all across the nation. They describe the necessary foundation skills and competencies necessary to succeed in the workplace. The Kentucky Workforce Roundtable and other organizations have adopted the employability skills to communicate the needs of industry to schools.

For more information about the skill standards, crosswalks or certification system for Industrial Technology Education, please contact:

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	OCCUPATIONAL STANDARDS
OA	Communication and Teamwork
OA001	Apply principles of interpersonal skills and teamwork to transportation situations.
OB	Math and Measurement
OB001	Create and interpret basic graphs and charts commonly used in transportation accurately.
OB002	Apply measurement techniques in transportation activities accurately.
OB003	Demonstrate proper general measurement techniques.
OB004	Demonstrate competencies in technical mathematics and in the use of applicable measuring tools and techniques.
OC	Workplace Safety and Health
OC001	Complete forms and paperwork as required.
OC002	Wear protective safety clothing as required.
OC003	Maintain and use protective guards and equipment on machinery.
OC004	Identify, handle and store flammable and hazardous materials appropriately.
OC005	Use electrical devices correctly and safely.
OC006	Practice proper waste disposal habits.
OC007	Keep aisles clear of equipment and materials.
OC008	Read and apply MSDS sheets.
OC009	Operate equipment in a safe, prescribed manner.
OC010	Follow established safety procedures when around machinery or equipment.
OC011	Follow established safety procedures when using tools or operating machinery.
OC012	Operate hand tools in a safe, prescribed manner.
OC013	Know location of power shutoff controls for all machinery and equipment.
OC014	Report safety malfunctions to appropriate personnel.
OC015	Inspect material, equipment and fixtures to determine defects.
OC016	Determine weight and operating limits of equipment.
OC017	Perform periodic checks during operation to assure proper function.
OC018	Respond to emergencies in the appropriate manner.
OC019	Apply ergonomics to the transportation process.
OC020	Demonstrate the ability to apply continuous quality improvement to transportation processes.
OC021	Integrate improvement processes.
OC022	Demonstrate methods of preventing accidents in the workplace.
OC023	Define a safe work environment.
OD	Problem Solving
OD001	Identify customer concerns.
OD002	Determine causes of the problem.
OD003	Apply problem-solving system.
OD004	Recommend possible solutions.
OD005	Inspect, troubleshoot, diagnose service, and/or verify compliance.
OE	Quality Assurance
OE001	Demonstrate compliance with manufacturers' required specifications and/or industry standards.
OE002	Identify how quality control systems influence specific transportation activities.
OE003	Develop a quality control plan.
OF	Operation, Maintenance & Service Publication
OF001	Read and interpret operation, maintenance and service publications and drawings.

OF002	Interpret commonly used abbreviations and terminology.
OG	Business Environment and Operation
OG001	Identify opportunities for profit in transportation processes.
OG002	Identify possible barriers to profit in transportation process.
OG003	Identify strategies that may maximize profit potential in transportation processes.
OG004	Define the term "value added" related to transportation process.
OG005	Identify steps within transportation processes that determine cost.
OH	Workplace Skills
OH001	Demonstrate safe, careful use, treatment and maintenance of tools, equipment, and/or machines.
OH002	Demonstrate basic mechanical and manipulative motor skills.
OH003	Demonstrate the ability to troubleshoot, diagnose, service, inspect, and/or verify a transportation concern.
OI	Learning Skills
OI001	Participate in product or process specific training.
OI002	Demonstrate ability to learn new process steps.
OI003	Implement new process steps given oral instructions.
OI004	Read process instructions and implement appropriate steps.
OJ	Transportation Fundamentals
OJ001	Identify a variety of common tools and/or equipment.
OJ002	Describe the function of specific tools and/or equipment.
OJ003	Interpret transportation resources to determine appropriate tool and/or equipment usage.
OK	Computer Use
OK001	Identify computer applications used in the transportation industry.
OK002	List various methods of tracking inventory quantities.
OK003	Identify factors that determine inventory demand.
OK004	Demonstrate use of transportation industry-accepted software packages.
OL	Science
OL001	Describe the internal combustion engine cycle.
OL002	Apply Ohm's law.
OL003	Describe the operations of basic electrical components.
OL004	Describe the principle of basic hydraulics and pneumatics.
OL005	Describe hand tools as simple machines.
ACADEMIC STANDARDS	
AA	Communication and Teamwork
AA001	Read process information and follow instructions.
AA002	Read material and describe concepts.
AA003	Use correct pronunciation, spelling, grammar, and syntax.
AA004	Write with accuracy, brevity, and clarity.
AA005	Apply conflict and resolution techniques.
AA006	Possess basic computer keyboarding skills.
AA007	Demonstrate basics of interpersonal communication (listening, written/oral, etc.).
AA008	Exhibit interpersonal characteristics of a team player.
AA009	Demonstrate the characteristics of a team player.
AA010	Contrast the role of a team with the role of an individual.
AA011	Demonstrate the techniques used as a team leader.
AA012	Demonstrate productive relationships within the work group.

AA013	Demonstrate the ability to communicate verbally using good speaking characteristics.
AA014	Apply basic leadership skills.
AB	Math and Measurement
AB001	Add, subtract, multiply, and divide four-digit numbers with the use of a calculator.
AB002	Add, subtract, multiply, and divide four-digit numbers without the use of a calculator.
AB003	Solve basic math problems.
AB004	Convert and distinguish between US and metric measurement systems.
AB005	Convert fractional measurement to decimal measurement.
AB006	Compute within measurement systems.
AB007	Document results of measurement activities and calculations.
AB008	Calculate with percents, rate, ratio, and proportion with the use of a calculator.
AB009	Estimate arithmetic results without the use of a calculator.
AB010	Use hand calculators.
AB011	Distinguish between direct and calculated measurements.
AB012	Compute industry related measurement problems accurately.
AB013	Determine areas and volumes of various geometrical shapes accurately.
AB014	Solve ratio, proportion, and percentage problems accurately.
AB015	Perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers accurately.
AC	Problem Solving
AC001	Apply narrative workplace problem-solving techniques of math and science.
AD	Business Environment and Operations
AD001	Identify the organizational need for profit.
AD002	Define the term "profit".
AD003	Explain the effect of quality on profit.
AD004	Identify the effects of continuous quality improvement.
AD005	Identify your customers.
AD006	Apply business ethics.
AD007	Describe the importance of having a multi mode transportation system used to move people and goods.
AE	Learning Skills
AE001	Identify personal preferred learning styles.
AF	Computer Use
AF001	Demonstrate use of word processing, spreadsheets, and database software packages.
AG	Science
AG001	Use and understand the principles of simple machines, sound, fluid, electrical, and heat dynamics
EMPLOYABILITY STANDARDS	
EA	Communication and Teamwork
EA001	Read documentation, such as computer manual, to determine actions for specific situations.
EA002	Organize materials with a logical flow.
EA003	Interpret and clarify directions prepared by others.
EA004	Interview the customer to establish his/her requirements.
EA005	Apply team concepts.

EA006	Write steps of an occupational process using sentences and statements as appropriate, such as service request.
EA007	Identify possible electronic communication methods.
EA008	Select appropriate communication methods.
EA009	Demonstrate the characteristics of a good group leader.
EA010	Select appropriate group processes.
EA011	Exhibit interpersonal skills and work as a team member.
EA012	Demonstrate group leadership.
EA013	Exhibit the proper use of manners in the work place.
EB	Workplace Safety and Health
EB001	Assume responsibility for the personal safety of self and others.
EB002	Maintain a clean and safe work environment.
EB003	Demonstrate a positive personal attitude towards safety.
EB004	Comply with established local, state, and federal safety and health practices.
EB005	Identify and understand the use of fire exits and fire-fighting equipment.
EB006	Report unsafe practices to appropriate personnel.
EB007	Identify methods of preventing accidents in the work place.
EC	Problem Solving
EC001	Select an appropriate problem-solving system.
EC002	Apply a system of problem-solving.
EC003	Identify opportunities for applying problem-solving techniques.
ED	Business Environment and Operations
ED001	Identify the components that lead to customer satisfaction.
ED002	Identify possible actions that may lead to customer dissatisfaction.
ED003	Identify ways customer satisfaction may affect company success.
ED004	Explain the importance of a business reputation.
ED005	Identify how customer satisfaction influences a business reputation.
ED006	Identify possible actions that may be used to correct customer dissatisfaction.
EE	Workforce Issues
EE001	List the differences between a team environment workplace and a conventional workplace.
EE002	Identify the characteristics of a diverse work force.
EE003	Identify and demonstrate ethical characteristics and behaviors.
EE004	Differentiate between good and poor business ethics practices.
EE005	Define discrimination, harassment and equity.
EE006	Give examples of non-discriminatory behavior.
EE007	Recognize confidential and sensitive company information.
EF	Workplace Skills
EF001	Demonstrate punctual, regular attendance.
EF002	Demonstrate enthusiasm and confidence about work and learning new tasks.
EF003	Demonstrate appropriate dress and hygiene for successful employment.
EF004	Demonstrate the ability to act in a polite and respectful way towards co-workers.
EF005	Demonstrate the ability to follow through and complete tasks on time and accurately.
EF006	Demonstrate the ability to make career decisions.
EF007	Prepare a resume and a letter of application or interest.
EF008	Complete an application for employment properly.
EF009	Participate in an employment interview.

EF010	Follow directions and procedures.
EF011	Accept constructive criticism.
EF012	Demonstrate an ability to learn new skills and behaviors.
EF013	Demonstrate a willingness to work and learn.
EF014	Work with minimal supervision.
EF015	Exhibit time management skills.
EF016	Identify factors involved in having a positive attitude toward the workplace and fellow employees.
EF017	Identify the importance of understanding personal limits and communicating to a supervisor the inability to complete a task due to knowledge, skill, physical, or emotional concerns.
EF018	Identify personal limits due to set authorization, company policies, rules, laws, and regulations.
EF019	Identify the importance of respecting yourself and others.
EF020	List strategies needed to adjust to change in the world of work.

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OCCUPATIONAL STANDARDS					
OA	Communication and Teamwork				
OA001	Apply principles of interpersonal skills and teamwork to transportation situations	5.4 5.5	Decision Making Problem Solving	C7 C9 F1 F2 F5 F6 F8 F9 F12	Interprets and Communicates Information Participates Reading Writing Listening Speaking Decision Making Problem Solving Reasoning
OB	Math and Measurement				
OB001	Create and interpret basic graphs and charts commonly used in transportation accurately	1.5 1.6 1.7 1.8 1.9 1.16 5.1	Quantifying Computing Visualizing Measuring Mathematical Reasoning Using Electronic Technology Critical Thinking	C8 F3 F4 F12	Uses Computers to Process Information Arithmetic Mathematics Reasoning
OB002	Apply measurement techniques in transportation activities accurately	2.10 6.1	Measurement Applying Multiple Perspectives	C7 F3 F4 F12	Interprets and Communicates Information Arithmetic Mathematics Reasoning
OB003	Demonstrate proper general measurement techniques	2.10 5.4	Measurement Decision Making	C7 F3 F4 F12	Interprets and Communicates Information Arithmetic Mathematics Reasoning
OB004	Demonstrate competencies in technical mathematics and in the use of applicable measuring tools and techniques	2.7 2.8 2.10 6.1	Number Mathematical Procedures Measurement Applying Multiple Perspectives	C7 F3 F4 F12	Interprets and Communicates Information Arithmetic Mathematics Reasoning
OC	Workplace Safety and Health				
OC001	Complete forms and paperwork as required	1.11	Writing	C9 C11 C12 F5 F6 F9 F12 F13 F16 F17	Participates Serves Clients/Customers Exercises Leadership Listening Speaking Problem Solving Reasoning Responsibility Self-Management Integrity/Honesty

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OC002	Wear protective safety clothing as required	2.30 2.31	Consumerism Physical Wellness	C6 C9 C11 C12 C16 C20 F1 F5 F6 F9 F12 F13 F16 F17	Organizes and Maintains Information Participates Serves Clients/Customers Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Listening Speaking Problem Solving Reasoning Responsibility Self-Management Integrity/Honesty
OC003	Maintain and use protective guards and equipment on machinery	2.31	Physical Wellness	C9 F13 F16 F17	Problem Solving Responsibility Self-Management Integrity/Honesty
OC004	Identify, handle and store flammable materials appropriately	2.1 2.31 4.3 4.4	Nature of Science Activity Physical Wellness Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C7 C9 C12 C16 C20 F1 F5 F6 F13 F16 F17	Organizes and Maintains Information Interprets and Communicates Information Participates Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Listening Speaking Responsibility Self-Management Integrity/Honesty
OC005	Use electrical devices correctly and safely	1.2 1.3 1.4 2.1 2.31 4.3 4.4	Reading Observing Listening Nature of Science Activity Physical Wellness Consistent, Responsive, Caring Behavior Rights and Responsibilities	C5 C6 C16 C20 F1 F12 F13 F16 F17	Acquires and Evaluates Information Organizes and Maintains Information Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Reasoning Responsibility Self-Management Integrity/Honesty

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OC006	Practice proper waste disposal habits	1.2 1.3 1.4 2.1 2.31 4.3 4.4	Reading Observing Listening Nature of Science Activity Physical Wellness Consistent, Responsive, Care Behavior Rights and Responsibilities	C6 F1 F12 F13 F16 F17	Organizes and Maintains Information Reading Reasoning Responsibility Self-Management Integrity/Honesty
OC007	Keep aisles clear of equipment and materials	2.31 4.3 4.4	Physical Wellness Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 F13 F16	Organizes and Maintains Information Responsibility Self-Management
OC008	Read and apply MSDS sheets	1.2 1.12	Reading Speaking	C5 C6 C7 F1 F8 F12 F13 F16	Acquires and Evaluates Information Organizes and Maintains Information Interprets and Communicates Information Reading Decision Making Reasoning Responsibility Self-Management
OC009	Operate equipment in a safe, prescribed manner	1.2 1.3 1.4 2.31 4.3 4.4	Reading Observing Listening Physical Wellness Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C20 F1 F5 F12 F13 F16 F17	Organizes and Maintains Information Maintains and Troubleshoots Technology Reading Listening Reasoning Responsibility Self-Management Integrity/Honesty
OC010	Follow established safety procedures when around machinery or equipment	1.2 1.3 1.4 4.3 4.4	Reading Observing Listening Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C20 F1 F5 F12 F13 F16 F17	Organizes and Maintains Information Maintains and Troubleshoots Technology Reading Listening Reasoning Responsibility Self-Management Integrity/Honesty

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OC011	Follow established safety procedures when using tools or operating machinery	1.2 1.3 1.4 2.31 4.3 4.4	Reading Observing Listening Physical Wellness Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C20 F1 F5 F12 F13 F16 F17	Organizes and Maintains Information Maintains and Troubleshoots Technology Reading Listening Reasoning Responsibility Self-Management Integrity/Honesty
OC012	Operate hand tools in a safe, prescribed manner	1.1 1.2 1.3 1.4 2.31 4.3 4.4	Accessing Sources of Information Reading Observing Listening Physical Wellness Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C20 F1 F5 F12 F13 F16 F17	Organizes and Maintains Information Maintains and Troubleshoots Technology Reading Listening Reasoning Responsibility Self-Management Integrity/Honesty
OC013	Know location of power shutoff controls for all machinery and equipment	1.3	Observing	C6 C20 F1 F5 F12 F13 F16 F17	Organizes and Maintains Information Maintains and Troubleshoots Technology Reading Listening Reasoning Responsibility Self-Management Integrity/Honesty
OC014	Report safety malfunctions to appropriate personnel	1.2 1.3 1.4 1.11 1.12	Reading Observing Listening Writing Speaking	C7 C20 F6 F12 F13 F16 F17	Interprets and Communicates Information Maintains and Troubleshoots Technology Speaking Reasoning Responsibility Self-Management Integrity/Honesty
OC015	Inspect material, equipment and fixtures to determine defects	1.3 5.4	Observing Critical Thinking	C5 C20 F12 F13 F16 F17	Acquires and Evaluates Information Maintains and Troubleshoots Technology Reasoning Responsibility Self-Management Integrity/Honesty

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OC016	Determine weight and operating limits of equipment	1.5 1.6 1.7 1.8 1.9 2.1 2.2 2.7 2.8 2.10	Quantifying Computing Visualizing Measuring Mathematical Reasoning Nature of Science Activity Patterns Number Mathematical Procedures Measurement	C19 F3 F12	Applies Technology to a Task Arithmetic Reasoning
OC017	Perform periodic checks during operation to assure proper function	1.3 1.4 1.11 5.1	Observing Listening Writing Critical Thinking	C5 C20 F8 F9 F13 F16	Acquires and Evaluates Information Maintains and Troubleshoots Technology Decision Making Problem Solving Responsibility Self-Management
OC018	Respond to emergencies in the appropriate manner	1.2 1.3 1.4 2.31 4.3 4.4 5.4	Reading Observing Listening Physical Wellness Consistent, Responsive, Caring Behavior Rights and Responsibilities Decision Making	C7 C9 C12 C13 C15 C18 F8 F9 F13 F16 F17	Interprets and Communicates Information Participates Exercises Leadership Negotiates to Arrive at a Decision Understands Systems Selects Technology Decision Making Problem Solving Responsibility Self-Management Integrity/Honesty
OC019	Apply ergonomics to the transportation process	1.1 1.11 1.12 2.1	Accessing Sources of Information Writing Speaking Nature of Science Activity	C7 F2 F6	Interprets and Communicates Information Writing Speaking

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OC020	Demonstrate the ability to apply continuous quality improvement to transportation processes	1.10 2.1 2.2 5.1 5.2 5.3 5.4 5.5 6.1	Classifying Nature of Science Activity Patterns Critical Thinking Creative Thinking Conceptualizing Decision Making Problem Solving Applying Multiple Perspectives	C5 C9 C10 C11 C12 C16 C20 F1 F2 F5 F6 F9 F11 F12 F13 F16	Acquires and Evaluates Information Participates Teaches Others Serves Clients/Customers Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Writing Listening Speaking Problem Solving Knows How to Learn Reasoning Responsibility Self-Management
OC021	Integrate improvement processes	1.2 1.3 1.4 1.10 2.1 2.2 5.1 5.2	Reading Observing Listening Classifying Nature of Science Activity Patterns Critical Thinking Creative Thinking	C7 C9 C10 C11 C12 C16 C20 F1 F2 F5 F6 F9 F11 F12 F13 F16	Acquires and Evaluates Information Participates Teaches Others Serves Clients/Customers Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Writing Listening Speaking Problem Solving Knows How to Learn Reasoning Responsibility Self-Management

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OC022	Demonstrate methods of preventing accidents in the workplace	1.2 1.3 1.4 2.1 2.2 2.31 3.5 3.6 4.3 4.4	Reading Observing Listening Nature of Science Activity Patterns Physical Wellness Self-Control and Self-Discipline Ethical Values Consistent, Responsive, Caring Behavior Rights and Responsibilities	C9 C12 C16 C20 F5 F6 F9 F11 F12 F13 F16 F17	Participates Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Listening Speaking Problem Solving Knows How to Learn Reasoning Responsibility Self-Management Integrity/Honesty
OC023	Define a safe work environment	1.2 1.3 1.4 2.1 2.2 2.3 3.5 3.6 4.3 4.4	Reading Observing Listening Nature of Science Activity Patterns Systems and Interactions Self-Control and Self-Discipline Ethical Values Consistent, Responsive, Caring Behavior Rights and Responsibilities	C9 C12 C16 C20 F5 F6 F9 F11 F12 F13 F16 F17	Participates Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Listening Speaking Problem Solving Knows How to Learn Reasoning Responsibility Self-Management Integrity/Honesty
OD	Problem Solving				
OD001	Identify customer concerns	1.2 1.3 1.4 1.11 4.1	Reading Observing Listening Writing Interpersonal Skills	C7 F5 F6 F15	Interprets and Communicates Information Listening Speaking Social
OD002	Determine causes of the problem	1.1 1.2 1.3 1.4 5.1	Accessing Sources of Information Reading Observing Listening Critical Thinking	C7 F5 F6 F9 F12 F15	Interprets and Communicates Information Listening Speaking Problem Solving Reasoning Social

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OD003	Apply problem-solving system	5.1 5.2 5.3 5.4 5.5 6.1	Critical Thinking Creative Thinking Conceptualizing Decision Making Problem Solving Applying Multiple Perspectives	C7 C9 C12 C16 C20 F5 F6 F9	Interprets and Communicates Information Participates Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Listening Speaking Problem Solving
OD004	Recommend possible solutions	1.11 1.12 5.1	Writing Speaking Critical Thinking	C7 C9 F2 F6 F9	Interprets and Communicates Information Participates Writing Speaking Problem Solving
OD005	Inspect, troubleshoot, diagnose service, and/or verify compliance	1.1 1.2 1.3 1.4 1.10 5.1 5.3	Accessing Sources of Information Reading Observing Listening Classifying Critical Thinking Conceptualizing	C7 C15 C16 C20 F2 F5 F6 F9 F12 F13	Interprets and Communicates Information Understands Systems Monitors and Corrects Performance Maintains and Troubleshoots Technology Writing Listening Speaking Problem Solving Reasoning Responsibility
OE	Quality Assurance				
OE001	Demonstrate compliance with manufacturers' required specifications and/or industry standards	1.1 1.2 1.3 1.4	Accessing Sources of Information Reading Observing Listening	C6 C7 F2 F13 F16 F17	Organizes and Maintains Information Interprets and Communicates Information Writing Responsibility Self-Management Integrity/Honesty
OE002	Identify how quality control systems influence specific transportation activities	6.1	Applying Multiple Perspectives	C7 C15 F2 F6 F11 F12	Interprets and Communicates Information Understands Systems Writing Speaking Knows How to Learn Reasoning

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OE003	Develop a quality control plan	1.1 1.2 1.3 1.4 1.10 2.1 2.2 5.1 5.2	Accessing Sources of Information Reading Observing Listening Classifying Nature of Science Activity Patterns Critical Thinking Creative Thinking	C5 C9 C10 C11 C12 C16 C20 F1 F2 F5 F6 F9 F12 F13 F16	Acquires and Evaluates Information Participates Teaches others Serves Clients/Customers Exercise Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology\ Reading Writing Listening Speaking Problem Solving Reasoning Responsibility Self-Management
OF	Operation, Maintenance & Service Publication				
OF001	Read and interpret operation, maintenance and service publications and drawings	1.2 1.11 1.12	Reading Writing Speaking	C7 F1	Interprets and Communicates Information Reading
OF002	Interpret commonly used abbreviations and terminology	1.2 1.11 1.12	Reading Writing Speaking	C7 F1	Interprets and Communicates Information Reading

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards

Kentucky Academic Expectations

SCANS

OG	Business Environment and Operation				
OG001	Identify opportunities for profit in transportation processes	1.11 1.12 2.18 6.1	Writing Speaking Structure and Function of Political System Applying Multiple Perspectives	C7 F2 F6 F12	Interprets and Communicates Information Writing Speaking Reasoning
OG002	Identify possible barriers to profit in transportation process	1.11 1.12 2.18 6.1	Writing Speaking Structure and Function of Economic System Applying Multiple Perspectives	C7 F2 F6 F12	Interprets and Communicates Information Writing Speaking Reasoning
OG003	Identify strategies that may maximize profit potential in transportation processes	1.11 1.12 2.18 5.1 6.1	Writing Speaking Structure and Function of Economic System Critical Thinking Applying Multiple Perspectives	C7 C15 F2 F6 F9 F12	Interprets and Communicates Information Understands Systems Writing Speaking Problem Solving Reasoning
OG004	Define the term "value added" related to transportation process	1.11 1.12	Writing Speaking	F2 F6 F11	Writing Speaking Knows How to Learn
OG005	Identify steps within transportation processes that determine cost	1.2 1.3 1.4 1.11 1.12 5.1 6.1	Reading Observing Listening Writing Speaking Critical Thinking Applying Multiple Perspectives	C7 C15 F2 F6 F12	Interprets and Communicates Information Understands Systems Writing Speaking Reasoning
OH	Workplace Skills				
OH001	Demonstrate safe, careful use, treatment and maintenance of tools, equipment, and/or machines	1.16 2.31 2.37 3.5 4.3 4.4	Using Electronic Technology Physical Wellness Employability Skills Self-Control and Self-Discipline Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C20 F1 F5 F9 F13 F16	Organizes and Maintains Information Maintains and Troubleshoots Technology Reading Listening Problem Solving Responsibility Self-Management
OH002	Demonstrate basic mechanical and manipulative motor skills	2.1 2.10 2.34	Nature of Science Activity Measurement Psychomotor Skills	C10 F6	Teaches Others Speaking

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OH003	Demonstrate the ability to troubleshoot, diagnose, service, inspect, and/or verify a transportation concern	1.1 1.2 1.3 1.4 2.1 5.1 5.4 5.5 6.1	Accessing Sources of Information Reading Observing Listening Nature of Science Activity Critical Thinking Decision Making Problem Solving Applying Multiple Perspectives	C5 C15 C16 C20 F1 F5 F9	Acquires and Evaluates Information Understands Systems Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Listening Problem Solving
OI	Learning Skills				
OI001	Participate in product or process specific training	1.2 1.3 1.4 1.11 1.12	Reading Observing Listening Writing Speaking	C7 F2 F6 F11	Interprets and Communicates Information Writing Speaking Knows How to Learn
OI002	Demonstrate ability to learn new process steps	3.1 3.3 3.7 5.1 5.3	Positive Growth in Self-Concept Task/Project Adaptable and Flexible Learn On One's Own Critical Thinking Conceptualizing	C6 C15 F1 F5 F9 F12	Organizes and Maintains Information Understands Systems Reading Listening Problem Speaking Reasoning
OI003	Implement new process steps given oral instructions	1.4	Listening	C7 F5 F9	Interprets and Communicates Information Listening Problem Speaking
OI004	Read process instructions and implement appropriate steps	1.2	Reading	C7 F1 F9	Interprets and Communicates Information Reading Problem Speaking
OJ	Transportation Fundamentals				
OJ001	Identify a variety of common tools and/or equipment	1.2 1.3 1.4 1.11 1.12	Reading Observing Listening Writing Speaking	C7 F2 F6	Interprets and Communicates Information Writing Speaking
OJ002	Describe the function of specific tools and/or equipment	1.2 1.3 1.4 1.11 1.12	Reading Observing Listening Writing Speaking	C7 F2 F6	Interprets and Communicates Information Writing Speaking

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OJ003	Interpret transportation resources to determine appropriate tool and/or equipment usage	1.2 1.3 1.4 1.10 1.11 1.12 2.1 5.1 6.1	Reading Observing Listening Classifying Writing Speaking Nature of Science Activity Critical Thinking Applying Multiple Perspectives	C5 F1 F2 F6 F9 F13	Acquires and Evaluates Information Reading Writing Speaking Problem Solving Responsibility
OK	Computer Use				
OK001	Identify computer applications' used in the transportation industry	1.16	Using Electronic Technology	C7 F2 F6	Interprets and Communicates Information Writing Speaking
OK002	List various methods of tracking inventory quantities	1.10 1.11	Classifying Writing	C7 C8 F2 F6	Interprets and Communicates Information Uses Computers to Process Information Writing Speaking
OK003	Identify factors that determine inventory demand	1.1 1.11 2.18 6.1	Accessing Sources of Information Writing Structure and Function of Economic System Applying Multiple Perspectives	C7 F2 F6	Interprets and Communicates Information Writing Speaking
OK004	Demonstrate use of transportation industry-accepted software packages	1.16	Using Electronic Technology	C8 C19	Uses Computers to Process Information Applies Technology to a Task
OL	Science				
OL001	Describe the internal combustion engine cycle	1.10 1.11 2.1 2.3	Classifying Writing Nature of Science Activity Systems and Interactions	C7 C15 C19 F2 F6 F10	Interprets and Communicates Information Understands Systems Applies Technology to a Task Writing Speaking Seeing Things in the Mind's Eye
OL002	Apply Ohm's law	2.1 2.3 2.8 5.4	Nature of Science Activity Systems and Interactions Mathematical Procedures Decision Making	C5 C15 C19 F3 F4 F10	Acquires and Evaluates Information Understands Systems Applies Technology to a Task Arithmetic Mathematics Seeing Things in the Mind's Eye
OL003	Describe the operations of basic electrical components	1.10 1.11 2.1 2.3 2.8	Classifying Writing Nature of Science Activity Systems and Interactions Mathematical Procedures	C7 C15 F2 F6 F10	Interprets and Communicates Information Understands Systems Writing Speaking Seeing Things in the Mind's Eye

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
OL004	Describe the principal of basic hydraulics and pneumatics	1.10 1.11 2.1 2.3 2.8	Classifying Writing Nature of Science Activity Systems and Interactions Mathematical Procedures	C7 C15 F2 F6 F10	Interprets and Communicates Information Understands Systems Writing Speaking Seeing Things in the Mind's Eye
OL005	Describe hand tools as simple machines	1.10 1.11 2.1 2.3 6.1	Classifying Writing Nature of Science Activity Systems and Interactions Applying Multiple Perspectives	C7 C15 F2 F6 F10	Interprets and Communicates Information Understands Systems Writing Speaking Seeing Things in the Mind's Eye
ACADEMIC STANDARDS					
AA	Communication and Teamwork				
AA001	Read process information and follow instructions	1.2	Reading	F1 F11 F12 F16	Reading Knows How to Learn Reasoning Self-Management
AA002	Read material and describe concepts	1.2 1.11 1.12	Reading Writing Speaking	C7 F1 F11 F12	Interprets and Communicates Information Reading Knows How to Learn Reasoning
AA003	Use correct pronunciation, spelling, grammar, and syntax	1.12 1.11	Speaking Writing	C7 F6 F2	Interprets and Communicates Information Speaking Writing
AA004	Write with accuracy, brevity, and clarity	4.1 4.2 4.3 4.4 4.5 4.6 5.1	Interpersonal Skills Productive Team Skills Consistent, Responsive, Caring Behavior Rights and Responsibilities Multicultural Sensitivity Open Mind to Alternative Perspectives Critical Thinking	C7 F2 F12	Interprets and Communicates Information Writing Reasoning
AA005	Apply conflict and resolution techniques	1.16	Using Electronic Technology	C5 C9 C12 F2 F6 F8 F9 F12 F15 F16	Acquires and Evaluates Information Participates Exercises Leadership Writing Speaking Decision Making Problem Speaking Reasoning Social Self-Management
AA006	Possess basic computer keyboarding skills	1.2 1.3 1.4	Reading Observing Listening	C8	Uses Computers to Process Information

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
AA007	Demonstrate basics of interpersonal communication (listening, written/oral, etc.)	4.1 4.2	Interpersonal Skills Productive Team Skills	C6 C7 F1 F2 F5 F6	Organizes and Maintains Information Interprets and Communicates Information Reading Writing Listening Speaking
AA008	Exhibit interpersonal characteristics of a team player	4.1 4.2	Interpersonal Skills Productive Team Skills	C7	Interprets and Communicates Information
AA009	Demonstrate the characteristics of a team player	2.14 2.15 2.16 4.1 4.2	Democratic Principle Structure and Function of Political System Structure and Function of Social System Interpersonal Skills Productive Team Skills	C9 F13 F16 F17	Participates Responsibility Self-Management Integrity/Honesty
AA010	Contrast the role of a team with the role of an individual	2.14 2.15 2.16 4.1 4.2	Democratic Principle Structure and Function of Political System Structure and Function of Social System Interpersonal Skills Productive Team Skills	C7 F2 F6	Interprets and Communicates Information Writing Speaking
AA011	Demonstrate the techniques used as a team leader	2.17 3.4 3.5 3.6 4.1 4.2 4.5	Cultural Diversity Resourceful and Creative Self-Control and Self-Discipline Ethical Values Interpersonal Skills Productive Team Skills Multicultural Sensitivity	C6 C7 C12 F5 F6 F7 F8 F9 F12 F14 F16 F17	Organizes and Maintains Information Interprets and Communicates Information Exercises Leadership Listening Speaking Creative Thinking Decision Making Problem Speaking Reasoning Self-Esteem Self-Management Integrity/HonestyListening
AA012	Demonstrate productive relationships within the work group	4.1 4.2	Interpersonal Skills Productive Team Skills	C9 F13 F16	Participates Responsibility Self-Management
AA013	Demonstrate the ability to communicate verbally using good speaking characteristics	1.12 5.2 5.3	Speaking Creative Thinking Conceptualization	C7 F6 F12 F15	Interprets and Communicates Information Speaking Reasoning Social

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
AA014	Apply basic leadership skills	2.14 2.15 2.16 3.5 3.6 4.1 4.2 4.5 4.6	Democratic Principle Structure and Function of Political System Structure and Function of Social System Self-Control and Self-Discipline Ethical Values Interpersonal Skills Productive Team Skills Multicultural Sensitivity Open Mind to Alternative Perspectives	C5 C6	Acquires and Evaluates Information Organizes and Maintains Information
AB	Math and Measurement				
AB001	Add, subtract, multiply, and divide four-digit numbers with the use of a calculator	2.7 2.8	Number Mathematical Procedures	F3	Arithmetic
AB002	Add, subtract, multiply, and divide four-digit numbers without the use of a calculator	2.7 2.8	Number Mathematical Procedures	F3	Arithmetic
AB003	Solve basic math problems	2.7 2.8	Number Mathematical Procedures	F4 F12	Mathematics Reasoning
AB004	Convert and distinguish between US and metric measurement systems	1.5 1.6 1.7 1.8 1.9 2.4 2.7 2.8 2.10	Quantifying Computing Visualizing Measuring Mathematical Reasoning Critical Thinking Number Mathematical Procedures Measurement	F4 F12 C7	Mathematics Reasoning Interprets and Communicates information
AB005	Convert fractional measurement to decimal measurement	2.7 2.8	Number Mathematical Procedures	F4 F12	Mathematics Reasoning
AB006	Compute within measurement systems	2.7 2.8 2.10	Number Mathematical Procedures Measurement	F3 F4 F12	Arithmetic Mathematics Reasoning
AB007	Document results of measurement activities and calculations	1.5 1.6 1.7 1.8 1.9	Quantifying Computing Visualizing Measuring Mathematical Reasoning	C7 F4 F12	Interprets and Communicates Information Mathematics Reasoning
AB008	Calculate with percents, rate, ratio, and proportion with the use of a calculator	2.7 2.8	Number Mathematical Procedures	F4 F12	Mathematics Reasoning
AB009	Estimate arithmetic results without the use of a calculator	2.7 2.8	Number Mathematical Procedures	F3 F12	Arithmetic Reasoning

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
AB010	Use hand calculators	2.7 2.8	Number Mathematical Procedures	C8 C19 F3 F4 F12	Uses Computers to Process Information Applies Technology to a Task Arithmetic Mathematics Reasoning
AB011	Distinguish between direct and calculated measurements	2.7 2.8 2.10 5.1	Number Mathematical Procedures Measurement Critical Thinking	C7 F3 F4 F12	Interprets and Communicates Information Arithmetic Mathematics Reasoning
AB012	Compute calculated measurement accurately	2.7 2.8 2.10	Number Mathematical Procedures Measurement	F3 F4 F12	Arithmetic Mathematics Reasoning
AB013	Determine areas and volumes of various geometrical shapes accurately	2.7 2.8 2.9	Number Mathematical Procedures Space and Dimensionality	F3 F4 F12	Arithmetic Mathematics Reasoning
AB014	Solve ratio, proportion, and percentage problems accurately	2.7 2.8 5.5	Number Mathematical Procedures Problem Solving	F3 F4 F12	Arithmetic Mathematics Reasoning
AB015	Perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers accurately	2.7 2.8	Number Mathematical Procedures	F3 F4 F12	Arithmetic Mathematics Reasoning
AC	Problem Solving				
AC001	Apply narrative workplace problem-solving techniques of math and science	1.5 1.6 1.7 1.8 1.9 2.1 2.2 2.7 2.8 2.10 5.5	Quantifying Computing Visualizing Measuring Mathematical Reasoning Nature of Science Activity Patterns Number Mathematical Procedures Measurement Problem Solving	C5 C7 F3 F4 F12 F9	Acquires and Evaluates Information Interprets and Communicates Information Arithmetic Mathematics Reasoning Problem Speaking
AD	Business Environment and Operations				
AD001	Identify the organizational need for profit	2.18	Structure and Function of Economic System	C7 F2 F6	Interprets and Communicates Information Writing Speaking
AD002	Define the term "profit"	2.18	Structure and Function of Economic System	C7 F2 F6	Interprets and Communicates Information Writing Speaking

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
AD003	Explain the effect of quality on profit	2.13 2.18 2.19 2.8 5.1	Visual Arts Structure and Function of Economic System Relationship of Geography to Human Activity Mathematical Reasoning Critical thinking	C5 C7 F12 F8	Acquires and Evaluates Information Interprets and Communicates Information Reasoning Decision Making
AD004	Identify the effects of continuous quality improvement	2.13 2.18 2.19 2.8 5.1	Structure and Function of Economic System Relationship of Geography to Human Activity Mathematical Reasoning Critical thinking	C5 C7 F12 F8	Acquires and Evaluates Information Interprets and Communicates Information Reasoning Decision Making
AD005	Identify your customers	2.16 2.17 2.18 2.19	Structure and Function of Social System Cultural Diversity Structure and Function of Economic System Relationship of Geography to Human Activity	C4 C11 C13 C14 F15	Allocates Human Resources Serves Clients/Customers Negotiates to Arrive at a Decision Works with Cultural Diversity Social
AD006	Apply business ethics	3.6	Ethical Values	C5 C7	Acquires and Evaluates Information Interprets and Communicates Information
AD007	Describe the importance of having a multimode transportation system used to move people and goods	2.16 2.18 2.19 2.17	Structure and Function of Social System Structure and Function of Economic System Relationship of Geography to Human Activity Cultural Diversity	C11 C18 C17 C15 F8 F9	Serves Clients/Customers Selects Technology Improves and Designs Systems Understanding Systems Decision Making Problem Solving

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards

Kentucky Academic Expectations

SCANS

AE	Learning Skills				
AE001	Identify personal preferred learning styles	3.1	Positive Growth in Self-Concept Task/Project	C5 F1 F5 F11 F14 F16	Acquires and Evaluates Information Reading Listening Knows How to Learn Self-Esteem Self-Management
AF	Computer Use				
AF001	Demonstrate use of word processing, spreadsheets, and database software packages	1.16	Using Electronic Technology	C8 C19	Uses Computers to Process Information Applies Technology to a Task
AG	Science				
AG001	Use and understand the principles of simple machines, sound, fluid, electrical, and heat dynamics	2.1 5.1	Nature of Science Activity Critical Thinking	C5 C15 C18 C19 F1 F3 F4 F9 F11	Acquires and Evaluates Information Understands Systems Selects Technology Applies Technology to a Task Reading Arithmetic Mathematics Problem Speaking Know How to Learn
EMPLOYABILITY STANDARDS					
EA	Communication and Teamwork				
EA001	Read documentation, such as computer manual, to determine actions for specific situations	1.1 1.2 5.3	Accessing Sources of Information Reading Conceptualizing	C5 F1 F9 F12	Acquires and Evaluates Information Reading Problem Speaking Reasoning
EA002	Organize materials with a logical flow	1.2 1.10 5.1	Reading Classifying Critical Thinking	C6 F12	Organizes and Maintains Information Reasoning
EA003	Interpret and clarify directions prepared by others	1.2 1.3 1.4 5.1	Reading Observing Listening Critical Thinking	C7 F1 F5 F12	Interprets and Communicates Information Reading Listening Reasoning
EA004	Interview the customer to establish his/her requirements	1.2 4.1 5.1	Reading Interpersonal Skills Critical Thinking	C7 C11 F5 F6 F9 F15 F16	Interprets and Communicates Information Serves Clients/Customers Listening Speaking Problem Solving Social Self-Management

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EA005	Apply team concepts	4.2	Productive Team Skills	C7 C9 C12	Interprets and Communicates Information Participates Exercises Leadership
EA006	Write steps of an occupational process using sentences and statements as appropriate, such as service requests	1.11 5.3	Writing Conceptualizing	C7 F2 F12	Interprets and Communicates Information Writing Reasoning
EA007	Identify possible electronic communication methods	1.16 5.4	Using Electronic Technology Decision Making	C3 C6 C13 C16 C18 F1 F2 F8	Allocates Materials and Facility Resources Organizes and Maintains Information Negotiates to Arrive at a Decision Monitors and Corrects Performance Selects Technology Reading Writing Decision Making
EA008	Select appropriate communication methods	1.2 1.3 1.4 5.1	Reading Observing Listening Critical Thinking	C5 F1 F8	Acquires and Evaluates Information Reading Decision Making
EA009	Demonstrate the characteristics of a good group leader	2.14 2.16 6.1	Democratic Principle Structure and Function of Social System Applying Multiple Perspectives	C7 F1 F2 F5 F6	Interprets and Communicates Information Reading Writing Listening Speaking
EA010	Select appropriate group processes	1.2 1.3 1.4 2.16 2.26 4.5	Reading Observing Listening Structure and Function of Social System Diversity Multicultural Sensitivity	C7 F2 F6	Interprets and Communicates Information Writing Speaking
EA011	Exhibit interpersonal skills and work as a team member	1.2 1.3 1.4 2.26 4.5	Reading Observing Listening Diversity Multicultural Diversity	C7 F2 F6	Interprets and Communicates Information Writing Speaking

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EA012	Demonstrate group leadership	3.5 3.6 3.7 4.3 4.4 4.5	Self-Control and Self-Discipline Ethical Values Learn on One's Own Consistent, Responsive, Caring Behavior Rights and Responsibilities Multicultural Sensitivity	C7 C9 C12 F5 F6 F8 F9 F13 F15 F16	Interprets and Communicates Information Participates Exercises Leadership Listening Speaking Decision Making Problem Solving Responsibility Social Self-Management
EA013	Exhibit the proper use of manners in the work place	1.3 1.4 1.11 2.16 2.19 2.34 3.1	Observing Listening Writing Structure and Function of Social System Relationship of Geography to Human Activity Psychomotor Skills Positive Growth in Self-Concept Task/Project	C3 C4 C9 C14 C15 F15	Allocates Materials and Facility Resources Allocates Human Resources Participates Works with Cultural Diversity Understands System Social
EB	Workplace Safety and Health				
EB001	Assume responsibility for the personal safety of self and others	2.31 3.5 3.6 4.1 4.2 4.3 4.4 5.1 6.1	Physical Wellness Self-Control and Self-Discipline Ethical Values Interpersonal Skills Productive Team Skills Consistent, Responsive, Caring Behavior Rights and Responsibilities Critical Thinking Applying Multiple Perspectives	C11 C12 F5 F6 F9 F12 F13 F16 F17	Serves Clients/Customers Exercises Leadership Listening Speaking Problem Solving Reasoning Responsibility Self-Management Integrity/Honesty
EB002	Maintain a clean and safe work environment	2.29 2.31 3.2 3.6 4.1 4.2 4.3 4.4	Family Life and Parenting Physical Wellness Healthy Lifestyle Ethical Values Interpersonal Skills Productive Team Skills Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C9 C11 C12 C16 C20 F1 F5 F6 F9 F12 F13 F16 F17	Organizes and Maintains Information Participates Serves Clients/Customers Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Listening Speaking Problem Solving Reasoning Responsibility Self-Management Integrity/Honesty

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EB003	Demonstrate a positive personal attitude towards safety	2.31 3.5 3.6 4.1 4.3 4.4	Physical Wellness Self-Control and Self-Discipline Ethical Values Interpersonal Skills Consistent, Responsive, Caring Behavior Rights and Responsibilities	C9 F13 F16 F17	Participates Negotiates to Arrive at a Decision Self-Management Integrity/Honesty
EB004	Comply with established local, state, and federal safety and health practices	1.1 1.2 1.3 1.4 3.5 3.6 5.4	Accessing Sources of Information Reading Observing Listening Self-Control and Self-Discipline Ethical Values Decision Making	C5 C6 C7 C9 C12 C16 C20 F1 F5 F6 F13 F16 F17	Acquires and Evaluates Information Organizes and Maintains Information Interprets and Communicates Information Participates Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Reading Listening Speaking Responsibility Self-Management Integrity/Honesty
EB005	Identify and understand the use of fire exits and fire-fighting equipment	1.3	Observing	C7	Interprets and Communicates Information
EB006	Report unsafe practices to appropriate personnel	1.11 1.12 3.6 4.3 4.4	Writing Speaking Ethical Values Consistent, Responsive, Caring Behavior Rights and Responsibilities	C7 C9 C11 C12 F13 F16 F17	Interprets and Communicates Information Participates Serves Clients/Customers Exercises Leadership Responsibility Self-Management Integrity/Honesty
EB007	Identify methods of preventing accidents in the work place	3.6 4.3 4.4 2.31	Ethical Values Consistent, Responsive, Caring Behavior Rights and Responsibilities Physical Awareness	C7 C9 C11 C12 F13 F16 F17	Interprets and Communicates Information Participates Serves Clients/Customers Exercises Leadership Responsibility Self-Management Integrity/Honesty
EC	Problem Solving				
EC001	Select an appropriate problem-solving system	1.11 1.12 5.1	Writing Speaking Critical Thinking	C7 C10 C15 F2 F6	Interprets and Communicates Information Teaches Others Understands Systems Writing Speaking

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EC002	Apply a system of problem-solving	1.5 1.9 2.1 5.1 5.2 5.3 5.5 6.1	Quantifying Mathematical Reasoning Nature of Science Activity Critical Thinking Creative Thinking Conceptualizing Problem Solving Applying Multiple Perspectives	C7 C9 C12 C16 C20 F5 F6 F9	Interprets and Communicates Information Participates Exercises Leadership Monitors and Corrects Performance Maintains and Troubleshoots Technology Listening Speaking Problem Solving
EC003	Identify opportunities for applying problem-solving techniques	1.11 1.12 5.1 5.2 5.3 5.4 5.5 6.1	Writing Speaking Critical Thinking Creative Thinking Conceptualizing Decision Making Problem Solving Applying Multiple Perspectives	C5 C15 F2 F6 F9	Acquires and Evaluates Information Understands Systems Writing Speaking Problem Solving
ED	Business Environment and Operations				
ED001	Identify the components that lead to customer satisfaction	1.3 1.4 1.11 1.12 2.18 5.4	Observing Listening Writing Speaking Structure and Function of Economic System Decision Making	C7 F2 F6 F12	Interprets and Communicates Information Writing Speaking Reasoning
ED002	Identify possible actions that may lead to customer dissatisfaction	1.2 1.3 1.4 4.1 5.4 6.1	Reading Observing Listening Interpersonal Skills Decision Making Applying Multiple Perspectives	C7 F2 F6 F12	Interprets and Communicates Information Writing Speaking Reasoning
ED003	Identify ways that customer satisfaction may affect company success	1.2 1.3 1.4 4.1 5.4 6.1	Reading Observing Listening Interpersonal Skills Decision Making Applying Multiple Perspectives	C7 F2 F6 F12	Interprets and Communicates Information Writing Speaking Reasoning
ED004	Explain the importance of a business reputation	1.11 1.12	Writing Speaking	C7 F2 F6	Interprets and Communicates Information Writing Speaking

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Skill Standards		Kentucky Academic Expectations		SCANS	
ED005	Identify the ways that customer satisfaction influences a business reputation	1.1 1.2 1.3 1.4 1.11 1.12 2.18 5.1	Accessing Sources of Information Reading Observing Listening Writing Speaking Structure and Function of Economic System Critical Thinking	C7 F2 F6 F12	Interprets and Communicates Information Writing Speaking Reasoning
ED006	Identify possible actions that may be used to correct customer dissatisfaction	1.3 1.4 1.11 1.12 2.18 5.1	Observing Listening Writing Speaking Structure and Function of Economic System Critical Thinking	C7 F2 F6 F12	Interprets and Communicates Information Writing Speaking Reasoning
EE	Workforce Issues				
EE001	List the difference between a team environment workplace and a conventional workplace	1.2 1.3 1.4 4.1 4.2 4.5	Reading Observing Listening Interpersonal Skills Productive Team Skills Multicultural Sensitivity	C7 C9 C15	Interprets and Communicates Information Participates Understands Systems
EE002	Identify the characteristics of a diverse work force	2.17 2.26 4.5 4.6 5.3	Cultural Diversity Diversity Multicultural Sensitivity Open Mind to Alternative Perspectives Conceptualizing	C5 C7 C9 C14 F13 F15 F16 F17	Acquires and Evaluates Information Interprets and Communicates Information Participates Works with Cultural Diversity Responsibility Social Self-Management Integrity/Honesty
EE003	Identify and demonstrate ethical characteristics and behaviors	2.29 2.32 3.6 5.4	Family Life and Parenting Mental and Emotional Wellness Ethical Values Decision Making	C5 C7 C9 F13 F15 F16 F17	Acquires and Evaluates Information Interprets and Communicates Information Participates Responsibility Social Self-Management Integrity/Honesty
EE004	Differentiate between good and poor business ethics practices	3.6 5.1	Ethical Values Critical Thinking	C7 C11 F17	Interprets and Communicates Information Serves Clients/Customers Integrity/Honesty

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EE005	Define discrimination, harassment and equity	2.16 2.17 2.29 2.31 2.32 2.36 3.6	Structure and Function of Social System Cultural Diversity Family Life and Parenting Physical Wellness Mental and Emotional Wellness Career Path Ethical Values	C7 C14 F1 F5 F6 F16 F17	Interprets and Communicates Information Works with Cultural Diversity Reading Listening Speaking Self-Management Integrity/Honesty
EE006	Give examples of non-discriminatory behavior	3.5 4.4 4.5	Self-Control and Self-Discipline Rights and Responsibilities Multicultural Sensitivity	C9 C10 F13 F15 F16 F17	Participates Teaches Others Responsibility Social Self-Management Integrity/Honesty
EE007	Recognize confidential and sensitive company information	3.6 5.1	Ethical Values Critical Thinking	C5 C6 C11 C12 F13 F16 F17	Acquires and Evaluates Information Organizes and Maintains Information Serves Clients/Customers Exercises Leadership Responsibility Self-Management Integrity/Honesty
EF	Workplace Skills				
EF001	Demonstrate punctual, regular attendance	2.37 3.5	Employability Skills Self-Control and Self-Discipline	F13 F16	Responsibility Self-Management
EF002	Demonstrate enthusiasm and confidence about work and learning new tasks	2.36 2.37 3.5 3.7	Career Path Employability Skills Self-Control and Self-Discipline Learn on One's Own	C9 C12 F5 F6 F15 F16	Participates Exercises Leadership Listening Speaking Social Self-Management
EF003	Demonstrate appropriate dress and hygiene for successful employment	2.29 2.31 2.36 2.37 3.5	Family Life and Parenting Physical Wellness Career Path Employability Skills Self-Control and Self-Discipline	C6 C12 F1 F5 F16	Organizes and Maintains Information Exercises Leadership Reading Listening Self-Management
EF004	Demonstrate the ability to act in a polite and respectful way towards co-workers	2.36 2.37 3.5 4.1 4.3	Career Path Employability Skills Self-Control and Self-Discipline Interpersonal Skills Consistent, Responsive, Caring Behavior	F1 F5 F16	Reading Listening Self-Management

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EF005	Demonstrate the ability to follow through and complete tasks on time and accurately	2.36 2.37 4.3 4.4	Career Path Employability Skills Consistent, Responsive, Caring Behavior Rights and Responsibilities	C6 C9 C11 C16 F13 F16 F17	Organizes and Maintains Information Participates Serves Clients/Customers Monitors and Corrects Performance Responsibility Self-Management Integrity/Honesty
EF006	Demonstrate the ability to make career decisions	2.36 2.37 2.38 5.4	Career Path Employability Skills Post-Secondary Opportunity Search Decision Making	C5 F8 F11 F13 F14 F16	Acquires and Evaluates Information Decision Making Knows How to Learn Responsibility Self-Esteem Self-Management
EF007	Prepare a resume and a letter of application or interest	2.34 5.3	Psychomotor Skills Conceptualizing	C8 C19 F1 F2 F7 F11	Uses Computers to Process Information Applies Technology to a Task Reading Writing Creative Thinking Knows How to Learn
EF008	Complete an application for employment properly	2.38 5.4	Post-Secondary Opportunity Search Decision Making	C5 C7 C19 F1 F2	Acquires and Evaluates Information Interprets and Communicates Information Applies Technology to a Task Reading Writing
EF009	Participate in an employment interview	2.38 3.4 3.5	Post-Secondary Opportunity Search Resourceful and Creative Self-Control and Self-Discipline	C7 C14 F5 F6 F11 F12 F15 F16 F17	Interprets and Communicates Information Works with Cultural Diversity Listening Speaking Knows How to Learn Reasoning Social Self-Management Integrity/Honesty
EF010	Follow directions and procedures	1.2 1.3 1.4 2.37 5.4	Reading Observing Listening Employability Skills Decision Making	C5 C6 F12 F13	Acquires and Evaluates Information Organizes and Maintains Information Reasoning Responsibility

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EF011	Accept constructive criticism	3.1 4.6	Positive Growth in Self-Concept Task/Project Open Mind to Alternative Perspectives	C6 C7 C9 C12 C16 F6 F11 F13 F14 F16	Organizes and Maintains Information Interprets and Communicates Information Participates Exercises Leadership Monitors and Corrects Performance Speaking Knows How to Learn Responsibility Self-Esteem Self-Management
EF012	Demonstrate an ability to learn new skills and behaviors	2.37 3.1 3.7	Employability Skills Positive Growth in Self-Concept Task/Project Learn On One's Own	C7 C16 F11 F16	Interprets and Communicates Information Monitors and Corrects Performance Knows How to Learn Self-Management
EF013	Demonstrate a willingness to work and learn	3.5 4.4	Self-Control and Self-Discipline Rights and Responsibilities	C16 F16	Monitors and Corrects Performance Self-Management
EF014	Work with minimal supervision	2.37 3.3 3.4 3.5 3.6 3.7 4.4 5.1 5.4	Employability Skills Adaptable and Flexible Resourceful and Creative Self-Control and Self-Discipline Ethical Values Learn On One's Own Rights and Responsibilities Critical Thinking Decision Making	F8 F13 F16	Decision Making Responsibility Self-Management
EF015	Exhibit time management skills	2.18 2.37 3.5 5.4	Structure and Function of Economic System Employability Skills Self-Control and Self-Discipline Decision Making	F13 F16 F8	Responsibility Self-Management Decision Making
EF016	Identify factors involved in having a positive attitude toward the workplace and fellow employees	2.16 3.1 3.2 3.3 3.4 3.5	Structure and Function of Social System Positive Growth in Self-Concept task/Project Healthy Lifestyle Adaptable and Flexible Resourceful and Creative Self-Control and Self-Discipline	C4 C7 C13 C14 F12 F14 F15	Allocates Human Resources Interprets and Communicates Information Negotiates to Arrive at a Decision Works with Cultural Diversity Reasoning Self-Esteem Social
EF017	Identify the importance of understanding personal limits and communicating to a supervisor the inability to complete a task due to knowledge, skills, physical, or emotional concerns	1.12 3.6	Speaking Ethical Values	C12 C17 F16	Exercise Leadership Improves and Designs Systems Self-Management
EF018	Identify personal limits due to set authorization, company policies, rules, laws, and regulations	1.12 3.6	Speaking Ethical Values	C12 C17 F16	Exercise Leadership Improves and Designs Systems Self-Management

Transportation Crosswalk of Skill Standards to Academic Expectations and SCANS

Skill Standards		Kentucky Academic Expectations		SCANS	
EF019	Identify the importance of respecting yourself and others	4.4 4.5 4.6 3.1	Rights and Responsibilities Multicultural Sensitivity Open Mind to Alternative Perspectives Positive Growth in Self-Concept Task/project	C9 C14 F14 F15 F13 F17	Participates Works with Cultural Diversity Self-Esteem Social Responsibility Integrity/Honesty
EF020	List strategies needed to adjust to change in the world of work	2.36 2.37 2.38 5.1	Career Path Employability Post-Secondary opportunity Search Critical Thinking	C16 C19 F5 F6 F17 F12 F14 F16	Monitors and Corrects Performance Applies Technology to a Task Listening Speaking Integrity/Honesty Reasoning Self-Esteem Self-Management